TO: Federal Communications Commissioners Ajit Pai, Mignon Clyburn, Michael O'Rielly

June 7, 2017

Re: WT Docket No. 17-79, and WT Docket No. 15-180, regarding 5G

Dear Commissioners,

RF bioimpacts <u>must be counted in</u>, and not only at a "tissue heating" exposure level. A major avenue of RF/EMF biological harm, <u>at non-thermal exposure levels</u>, has been clearly identified: interference with voltage gated calcium channels (VGCC's). This affects all species that have cell membranes. See, e.g.,

- "How to Approach the Challenge of Minimizing Non-Thermal Health Effects of Microwave Radiation from Electrical Devices" — Martin Pall, Ph.D, International Journal of Innovative Research in Engineering & Management (IJIREM) ISSN: 2350-0557, Volume-2, Issue -5, September 2015 — http://ahappyhabitat.com/docs/martinpall8-2015.pdf
- "Scientific evidence contradicts findings and assumptions of Canadian Safety Panel 6: microwaves act through voltage-gated calcium channel activation to induce biological impacts at non-thermal levels, supporting a paradigm shift for microwave/lower frequency electromagnetic field action," Martin Pall, Ph.D https://www.degruyter.com/view/j/reveh.ahead-of-print/reveh-2015-0001/reveh-2015-0001.xml
- "Low intensity microwave frequency electromagnetic fields (EMFs) produce extensive brain damage and widespread neuropsychiatric effects." — http://www.europsy-journal.com/article/S0924-9338(16)01914-3/pdf European Psychiatry, March 2016, Martin Pall, Ph.D

I've suffered enough ill-effects from the forms of wireless emissions that exist already. I object to all RF-emissions — imposed into our properties and homes without homeowners' informed consent — for reasons of privacy, property rights, and bioimpacts. I object to 5G, for all of these reasons, far more than to all previous forms.

I had to move (in 1986) away from a home (that I loved), because the nearby (9 blocks) broadcast/telecomm facilities' emissions proved too much for me. Effects included sleeplessness, headache, aches and pains (and unsustainability of musculoskeletal alignment), muscle cramps ("charlie horses"), immune and assimilation difficulties, impaired focus/concentration/motivation,... And each time a group visited my home for music practice, everyone would lose rhythm-sense within 10 minutes. We'd take a break for neurological-integration activities (in a hallway sheltered from the broadcast-towers by 5 walls), recover rhythm-sense and resume playing; if we stayed in that sheltered (but cramped) space, we were good for 1/2 hour (before everyone's bar-lines fell apart again); if we instead went back to the front room (with space and nice windows, but unshielded), we were only good for 10 minutes. (The signals in that space were noticeable through equipment too: we couldn't play an LP without hearing also broadcast voices through the speakers.)

Once I moved (to a suburb without broadcast towers for miles, or celltowers for a mile — and that one's down over a hill), I regained good sleep, structural sustainability, concentration, and other aspects of health, for 13 years — till, in 1999, PSE installed "smart" meters (AMR) on the neighborhood and my house. I was busy, couldn't think about another thing, assured myself it would be OK; but by 3 am the first night, I found out it was NOT OK — right back to the same problems as before I moved, plus a tremor (I used to be able to draw and write competently; now I can't), impaired eyesight, tinnitus, and nosebleeds.

The rare times I get to visit and sleep in a more electropeaceful space (free of "smart" meters, cell arrays, WiFi — not to mention broadcast towers) — even one night has obviated my otherwise-necessary digestive supplements (i.e., allowed my system to resume its own manufacture of appropriate digestants) and reduced the tinnitus. All the difficulties resume within hours of return to the "smart"-metered space (let alone attempting to sleep here) — my system doesn't get to engage in the normal assimilation-and-repair processes that bodies were designed to use every night's sleep *for*.

I've spent unconscionable time and money in search of mitigations. Some help noticeably, some don't, but <u>none</u> (each or cumulatively) <u>are sufficient</u> — let alone <u>sustainably</u> sufficient, as the number, kinds, and intensities of emissions keep rising.

All the ill-effects that I experience are well-explainable in terms of VGCC's disruption.

There is no longer a reliably safe (electropeaceful) place for me to move to; and your 5G plan will ensure that there will no longer be safe places for me to go even temporarily.

All life-forms have cell-membranes and depend on VGCC's functions. RF affects all life-forms (the planet's wealth and eco-balance of biodiversity — and the humans who haven't yet recognized the connection) — not only the few humans who are noticing discomforts and speaking up, "canaries" for all.

This is our <u>lives</u>, not just a computer game. PLEASE halt 5G — PLEASE don't make the planet any more uninhabitable than the FCC (on my tax dollars), and the polluting industry the FCC is appointed to govern, have already made it! PLEASE instead

- correct the Telecomm Act of 1996, to ALLOW states and local governments' authority over wireless installations' sitings. INCLUDING apropos of bioimpacts.
- LEAVE INTACT at least current requirements to notify the public of installations; and
- correct RF safety criteria, to
 - take account of all research (not just corporate-funded research) SINCE 1984 (when, for instance, cellphones first came into use)
 - recognize bioimpacts at non-thermal exposure levels, long-term (not just "6 minutes at 6' distance") and for people of all ages and sizes (not just "6' adult male"), and
 - establish such criteria as <u>rules</u>, not just "guidelines."

Sincerely, Olemara Peters Redmond, WA 98073

Filed from my landlined computer.